KOSTYAKOVA, A.N., nauchn. sotr.; MELAMUT, D.L., kand. tekhn. nauk, nauchn. sotr.; MENTYUKOV, V.P., inzh., nauchn. sotr.

[Hydraulic fill of dams composed of gravely soil] Namyv plotin iz gravelistykh gruntov. Moskva, Sel'khozizdat, 1963. 12 p. (MIRA 17:9)

1. Russia (1923- U.S.S.R.) Ministerstvo sel'skogo khozyaystva. Upravleniye nauki, propagandy i vnedreniya peredovogo opyta. 2. Laboratoriya gidromekhanizatsii zemlyanykh rabot Vsesoyuznogo nauchno-issledovatel'skogo instituta gidrotekhniki i melioratsii.

KOSTYAKOVA, A.I., dotsent; DOBRYNINA, V.I., dotsent, direktor.

Qualitative determination of quinine in pharmacopoeial preparations, by the fluorescent method. Apt.delo 2 no.3:17-19 My-Je '53. (MLRA 6:6)

1. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR. (Quinine)

USSR/Chemistry - Acridine Derivatives Jul/Aug 51

"Fluorescent Method for Qualitative and Quantitative Determination of Quinacrine and Rivanol in Biological Matter," A. I. Kostyakova, Moscow Pharm Inst

"Zhur Analit Khim" Vol VI, No 4, pp 251-256

Worked out very sensitive luminescent-chromatographic method for detn of quinacrine and rivanol. It is suitable for qual and quant detn of these substances in urine and int organs of corpses. Fluorescence is measured in strongly acidic and

183T30

LC

USSR/Chemistry - Acridine Derivatives Jul/Aug 51 (Contd)

LC

strongly basic solns. Method permits jaundice caused by yellow pigments to be distinguished from that caused by int adm of quinacrine.

183T30

KOSTYAKOVA, A. I.

LC

183T30

S/182/63/000/001/008/012
A004/A126

AUTHORS: Kostyakov, V. N., Yerinov, A. Ye.

TITLE: Oxidation and decarbonization of steel in reverberatory furnaces with incomplete combustion of natural gas

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 1, 1963, 29 - 32

TEXT: The authors give an account of some test data obtained in studies of oxidation and decarbonization processes of the alloy steel grades P 18 (R18), ШХ15 (ShKh15) and ХГ (KhG) in an atmosphere of products of incomplete combustion of natural gas. Engineer V. N. Danilevich participated in the work. Cylindrical specimens 19 - 21 mm in diamter and 50 - 51 mm in length were tested. A schematic drawing and a description of the test installation is given. The tests are also described in detail. A complete oxidation stop could not be observed with any of the steels tested, even at a coefficient of air consumption $a_{ac} = 0.4$, although in this case the magnitude of loss through burning was infinitely small and amounted to some thousandths of gr/cm^2. It follows from the tests that in the combustion of fuel with $a_{ac} = 0.4$, the loss through burning of the tested steels

Card 1/2

KOSTYAKOV, V.N., kand. tekhn. nauk; YERINOV, A.Ye., kand. tekhn. nauk; GORODETSKIY, V.V., inzh.

Economic efficiency of the use of flame furnaces with nonoxidizing heating. Mashinostroenie no.5:80-82 S-O '65. (MIRA 18:9)

KOSTYAKOV, V.N.; YERINOV, A.Ye.

Heating metal for forging in a nonoxidizing, semicontinuous pusher-type furnace. Kuz.-shtam. proizv. 5 no.10:32-36 O '63. (MIRA 16:11)

KOSTYAKOV, V.N ; YEFIMOV, A.Ye.

Characteristics of the incomplete combustion of fuel. Gaz. prom. 7 no.11:26-30 N '62. (MIRA 17:2)

YERINOV, A.Ye.; KOSTYAKOV, V.N.

Selecting fuel for nonoxidizing heating furnaces in high-temperature treatment of metal by pressure. Gaz. prom. 6 no.12:20-24 '61. (MIRA 15:2)

(Metallurgical furnaces)
(Oxidation)

KOSTYAKOV, N.I., inzh.; MOROZOV, V.A., inzh.

New electrophysical devices for the structural testing of buildings. Gor. khoz. Mosk. 36 no.10:44-45 O '62. (MIRA 15:12)

1. Moskovskiy gorodskoy trest geologo-geodezicheskikh i kartograficheskikh rabot arkhitekturno-planirovochnogo upravleniya Mosgorispolkoma.
(Ultrasonic testing)
(Buildings—Repair and reconstruction)

SHERDYUKOV, Ya.I., inzhener; KOSTYAKOV, N.I., inzhener.

Improving methods of testing structures and materials. Gor.khoz. Mosk. 30 no.4:29-31 Ap '56. (MLRA 9:8)
(Building materials--Testing)

PSHENICHNIKOV, Sergey Nikolaevich, nauchnyy sotrudnik; KOSTYAKOV, B.A., redaktor; MAL'KOVA, N.V., tekhnicheskiy redaktor

[Reinforced concrete bridge spans placed on suspended structures made of fitted blocks] Zhelezobetonnye proletnye stroeniia, sobiraemye navesnym sposobom iz zaranee izgotovlennykh blokov. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1956. 49 p. (MLRA 9:9)
(Bridges, Concrete)

KOSTYAKOV, A. A.

242T59

USSR/Mathematics - Wave Resistance Jan/Feb 53

"Wave Resistance of a Ship Convoy," A. A. Kostyakov, Odessa

"Priklad Matemat i Mekhan" Vol 17, No 1, pp 33-38

Solves eqs of Mitchell assuming all ships of equal size and at equal distances and using usual theory of wave formation and wave resistance. Received 13 Jun 52.

242T59

KOSTYAGIN, P.

Description - Tunis

In the capital of Tunisia. Vokrug sveta, No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1953, Unclassified.

KOSTYAGIN, P.

Algeria-description and travel

In Northern Algeria (Vokrug sveta No. 5, 195[illegible].

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

HANKISS, Janos; KOSTYA, Katalin

Hepatic lymphedema and experimental cirrhosis induced by collodion coating method. Kiserletes Orvostudomany 11 no.1:69-75 Feb 59.

1. Debreceni Orvosegyetem I. sz. Belklinikaja.

(LIVER DISEASES, exper.
lymphedema & consequent liver cirrhosis induction in cats & rats by blockade of subcapsular lymphatic vessels through collodion coating of total liver surface (Hun))
(LIVER CIRRHOSIS, exper.
induction of hepatic lymphedema & consequent cirrhosis in cats & rats by blockade of subcapsular lymphatic vessels through collodion coating of total liver surface (Hun))
(LYMPHEDEMA, exper.
same)

GDR/General Problems of Pathology - Tumors. Metabolism. U.

Abs Jour : Ref Zhur - Biol., No 19, 1958, 89572

Author : Myiri, I., Kostya, K.
Inst : -
Title : On the Hormonal Relationship in Female Genital Carcinoma.

Orig Pub : Zbl. Gynäkol., 1957, No 17, 663-673.

Abstract : Thirty patients under X-ray therapy were investigated. The first group of patients (15) with favorable results of radiation showed an increased excretion of 17-ketosteroids. Ketosteroid excretion decreased in patients with spread of the neoplastic process (second group, ten patients) and in patients with unsuccessful therapy (third group, five patients).
Bibliography of 39 titles. -- S.S. Rogovenko.

Card 1/1

NYIRI, Istvan, dr.; KOSTYA, Katalin, dr.

17-ketosteroid excretion in pelvic inflammatory diseases.
Magy. noorv. lap 18 no.5:276-281 Sept 55.

1. A Debreceni Orvostudomanyi Egyetem Szuleszeti es Nogyogvaszati klinikajanak kozlemenye. Igazgato: Arvay, Sandor dr. egy. tanar.

(UTERUS, diseases
inflamm. of pelvic region, devrease in 17-ketosteroid excretion, relation to adrenal cortex funct.)
(PELVIS, diseases
inflamm., decrease in 17-ketosteroid excretion, relation to adrenal cortex funct.)
(STEROIDS, determination
17-keto, in inflamm. of pelvic region, decrease.)
(ADRENAL CORTEX, in various diseases
inflamm. of pelvic region, decreased 17-ketosteroid excretion.)

NYIRI, Istvan, dr.; KOSTYA, Katalin, Dr.

Carcinoma of female genitalia in relation to androgen levels (Hun). Magy.noorv.lap. 17 no.6:345-348 Nov 54.

1. A Debreceni Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati klinikajanak (Igazgato: Arvay Sandor dr. egyetemi tanar) es I. sz. Belklinikajanak (Igazgato: Fornet Bela dr. egyetemi tanar) kozlemenye.

(GENITALIA, FEMALE neoplasms
relation to androgen levels (Hun)
(ANDROGENS
relation to carcinoma of female genitals)

Kostya, Katalin

VARGA, Emil; ASZODI, Lili; KOSTYA, Katalin

Effect of adenosinetriphosphate on glycogen phosphorylase of denervated muscle. Kiserletes orvostud. 6 no.4:303-305 July 54.

1. Debreceni Orvostudomanyi Egyetem Elettani es Korelettani Intezete.

(ADENYLPYROPHOSPHATE, eff.
on glycogen phosphorylase of denervated muscle)
(MUSCLE, INNERV.
denervation, eff. of ATP on glycogen phosphorylase)
(PHOSPHORYLASES
glycogen phosphorylase of denervated muscle, eff. of ATP)

KOSTYA, K

Aszodi, L.; Kostya, K.; Varga, E.

"Effect of adenosintriphosphate on the Glycogenphosphorolysis of Denervated Muscles and on the Degeneration of the Peripheric Nerves." p. 25 (Acta Physiologica. Supplement to v. 4, 1953, Budapest.)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June. 1954, Uncl.

KOSTVOS, V.N.

Soviet scientific exhibits abroad. Vest.AN SSSR 30 no.7: 45-48 J1 '60. (MIRA 13:7)
(Exhibitions)

SHOPOV,As.; DIMITROV,D.A.; IONCHEV,V.; MARINOV,At.; KOSTURKOVA,M.

On the treatment of pulmonary tuberculosis with cycloserine.
Suvrem. med.,Sofia 11 no.2-3:47-57 '60.

1. Iz Klinikata po ftiznatriia pri VMI "I.P.Pavlov" - Plovdiv, Direktor: prof. As. Shopov; i Klinikata po psikhiatriia pri Sushtiia Institut,Direktor: prof. K. Cholakov.
(CYCLOSERINE ther.)
(TUBERCULOSIS PULMONARY ther.)

MANOLOV, D.G.; KOSTURKOV, G.B.

Effect of dysentery bacteriophage on the course of experimental Shigella cystitis in guinea pigs. Zhur. mikr. biol., epid. i immun. 42 no.7:144-145 Jl '65. (MIRA 18:11)

1. Sofiyskiy nauchno-issledovatel'skiy institut epidemiologii i mikrobiologii.

KOSTURKOV, G.

Characteristics of pulmonary ventilation in some forms of pulmonary tuberculosis. Folia med. (Plovdiv) 6 no.1:27-32 '64

1. Vyashiy meditsinskiy institut imeni I.P.Pavlova, g. Plovdiv, Bolgariya (rukovoditel': doktor med. nauk, prof. L.Telcharov).

KOSTURKOV, G.

Studies on the pathogenesis of ventilatory disturbances in patients with lung tuberculosis I. Influence of age. Folia med. (Plovdiv) 6 no.2:83-87 '64

1. Higher Medical Institute "I.P.Pavlov" in Plovdiv, Bulgaria (Chief: Doctor of Med. Science Prof. L. Telcharov).

2. Research fellow of a post-graduate studentship in the Chair of Pathophysiology of Higher Medical Institute in Plovdiv, Bulgaria.

DIMITROV, D.A., kand.med.nauki; KOSTURKOV, G.

On the problem of variability of Mycobacterium tuberculosis under the influence of antibercular preparations. Suvrem med., Sofia no.11: 55-60 '60.

1. Iz Katedrata po ftiziatriia pri VMI "I.P.Pavlov," Plovdiv (Rukov. na katedrata prof. As.Shopov) i Okruzhnata tuberkulozna bolnitsa, Plovdiv (Glaven lekar St.Minchev)

(MYCOBACTERIUM TUBERCULOSI pharmacol)
(ANTITUBERCULAR AGENTS pharmacol)

KOSTURKOV, G., research fellow

Studies on the pathogenesis of ventilatory disturbances in patients with lung tuberculosis. Part II.

1. Higher Medical Institute "I.P. Pavlov" in Plovdiv, Bulgaria, Chair of Pathophysiology. (Chief: Doctor of Med. Sciences, Prof. L. Telcarov).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300049-6

KOSTURKOV, G.; DIMITROV, D.A.; MINCHEV, S.; KIM UUN KU.

Half-second rate capacity as a test in the determination ventilation insufficiency in pulmonary tuberculosis. Suvrem. med., Sofia 9 no.7: 92-97 1958.

1. Iz Okruzhnata tub. bolnitsa v gr. Plovdiv (Gl. lekar: S. Minchev) i Klinikata po Ftiziatriia pri VMI, I. P. Pavlov Plovdiv Zav. katedrata: prof. A. Shopov).

(TUBERCULOSIS, PULMONARY, physiol.
resp. ventilation half-second rate test (Bul))

KOSTURKIEWICZ, Andrzej

Sewage utilization for agriculture and silviculture purposes.
Sylwan 104 no.1:63-74 Ja '60.

KOSTURKIEWICZ, Andrzej

Ground water level fluctuations in clearings of pine forest stands. Prace nauk roln i lesn 17 no.3:385-410 '65.

KOSTURKEVICH, [illegible]; STRUCHKOV, Yu.T.

Space groups and unit cells of organic compounds. Report No. 3: X-ray diffraction study of some alkaline salts of dinitroalkanes. Zhur. strukt.khim. 5 no. 2:[illegible] Mr-Ap '64. (MIRA 17:6)

1. Universitet imeni Adama Mitskevicha, Poznan', Pol'sha i Institut elementoorganicheskikh soyedineniy AN SSSR.

KOSTYRKO, Z.S.

Space groups and unit cells of organic compounds. Report N 5: Derivatives of N-oxides of pyridine and quinoline. Zhur. strukt. khim. 5 no. 2:323-324 Mr-Ap '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Uniwersytet imeni Adama Mitskevicha, Poznan', Polsha.

KOSTURINA G. N.

USSR/Human and Animal Physiology - Liver. R-7

Abs Jour : Referat Zhur - Biol., No 16, 1957, 70876

Author : Kosturina, G.N.
Inst :
Title : Functional State of Liver in Rheumatic Children.

Orig Pub : Autoref. diss. kand. med. in-t Kharkov, 1956,

Abstract : No abstract.

Card 1/1

PSAREV, V.I. [Psar'ov, V.I.]; KOSTUR, N.L. [Kostur, N.L.]; DOBRYDEN', K.A.; KOSTUR, T.A. [Kostur, T.O.]

The semiconducting compound Cd_4Sb_3. Ukr. fiz. zhur. 9 no.10: 1141-1143 O '64 (MIRA 18:1)

1. Chernovitskiy gosudarstvennyy universitet.

KOSTUR, Peter; PUTEK, Stefan

Use and evaluation of the CANARAD-R corrosion inhibitor. Ropa a uhlie 7 no.2:35-43 F '65.

1. Slovnaft National Enterprise, Research Institute of Petroleum and Hydrocarbon Gases, Bratislava.

KOSTUR, Peter

Protection against corrosion by sulfurous petroleum.
Ropa a uhlie 5 no.6:170-175 Je '63.

1. Slovnaft, Vyskumny ustav pre ropu a uhlovodikove plyny, Bratislava.

L 04302-67
ACC NR: AP6029813

ing. Formation of the intermediate metastable phases is characteristic for melts overheated to 50-150°C above their melting points. The following optimum conditions are recommended for selective crystallization of CdSb single crystals: temperature of the molten zone equal to 460-480°C and temperature in the crystallization zone equal to 420-440°C. Orig. art. has: 5 figures.

SUB CODE: 20 / SUBM DATE: 14Jul65/ ORIG REF: 005/ OTH REF: 004

Card 2/2

L 04302-67 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6029813 (A) SOURCE CODE: UR/0363/66/002/008/1383/1389

38
37
B

AUTHOR: Kostur, N. L.; Psarev, V. I.

ORG: Chernovtsy State University (Chernovitskiy gosudarstvennyy universitet)

TITLE: Conditions for crystallization of the intermediate phases in the Cd-Sb system

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1383-1389

TOPIC TAGS: crystallization, phase diagram, solution property, phase composition, phase analysis, cadmium, antimony

ABSTRACT: The Cd-Sb system was studied in the 41.93-52.0 wt % Sb range by a combination of metallographic-, thermographic-, and x-ray techniques in order to define the conditions of crystallization of the stable and metastable phases of the system. Samples were prepared by fusing mixtures of pure components in sealed ampoules for 5 hr at 630-640°C and 10^{-3}-10^{-4} mm Hg. For a given rate of cooling (100-300 deg/hr) the formation of the intermediate phases was found to depend upon the maximum temperature of the melt. The variation in the formation of these phases depends apparently upon the presence of undissociated CdSb molecules which act as seeds during the crystallization process. A compound with a composition close to that of CdSb was found to crystallize out at 420-450°C. The CdSb, Cd_4Sb_3, and Cd_3Sb_2 crystallize only from melts heated up to 630°C. The metastable phases can be stabilized by means of rapid cool-

Card 1/2 UDC: 546.48+546.86

L 47341-66 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) GG/JG/JD/WW

ACC NR: AR6025 56 SOURCE CODE: UR/0058/66/000/004/A075/A075

AUTHOR: Kostur, N. L.; Psarev, V. I.

TITLE: Features of crystallization of the CdSb compound from melts

SOURCE: Ref. zh. Fizika, Abs. 4A628

REF SOURCE: Sb. Simpozium. Protsessy sinteza i rosta kristallov i plenok poluprovodnik. materialov, 1965. Tezisy dokl. Novosibirsk, 1965, 13-14

TOPIC TAGS: cadmium compound, antimonide, crystallization, phase composition, stoichiometry, single crystal growing, crystal impurity

ABSTRACT: An investigation was made of the influence of supercooling of a melt, which depends on the rate of its cooling, the degree of prior superheating, and the content of extraneous impurities, on the formation of stable and metastable phases during the solidification of melts corresponding to the composition of the compund CdSb. It is shown that CdSb compound ingots which solidify in the temperature interval 450 - 420C have a single-phase structure with minimum deviation from stoichiometry. The solution was superheated by 10 - 30°. On the basis of the obtained results, the most optimal regimes are proposed for growing CdSb single crystals of stoichiometric composition and of crystals doped with various impurities. [Translation of abstract]

SUB CODE: 20

Card 1/1

compounds with alloys of systems corresponding to them is very effective. It is particularly valuable because data on the solubility of elements, which are necessary in direct alloying and are lacking for intermetallic compounds, are not needed in this method. Orig. art. has: 5 figures.

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 005

TS

L 1461h-66 EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD
ACC NR: AT6002264 SOURCE CODE: UR/2564/65/006/000/0288/0295

AUTHOR: Kostur, N. L.; Psarev, V. I.

ORG: none

TITLE: Alloying crystals of some intermetallic compounds by means of alloys [Paper presented at the Third Conference on Crystal Growing held in Moscow from 18 to 25 November, 1963]

SOURCE: AN SSSR, Institut kristallografii. Rost kristallov, v. 6, 1965, 288-295

TOPIC TAGS: cadmium compound, antimonide, indium compound, electric conductivity, Hall constant, thermoelectromotive force

ABSTRACT: CdSb and InSb compounds were alloyed with alloys of the corresponding systems. The alloying elements chosen for CdSb were Ag, Au, Pb, and Bi, and for InSb, Bi and Hg. Crystals of the alloyed compounds were then used for growing large single crystals by zone recrystallization. The degree of alloying was determined in these crystals measuring the temperature dependence of the electrical conductivity σ, Hall constant R, and thermo-emf α. The results shows that the method of alloying intermetallic

Card 1/2

PSAREV, V.I. [Psar'ov, V.I.]; KOSTUR, N.L. [Kostur, M.L.]; DOKHTUEN', K.A.; KOSTUR, T.A. [Kostur, T.O.]

The semiconducting compound Cd_4Sb_3. Ukr. fiz. zhur. 9 no.10: 1141-1143 O '64 (MIRA 18:1)

1. Chernovitskiy gosudarstvennyy universitet.

KOSTUR, N.L. [Kostur, M.L.]; PSAREV, V.I. [Psar'ov, V.I.]

Solubility and the effect of certain elements on the physical properties of the compounds InSb and CdSb. Ukr. fiz. zhur. 9 no.8:900-907 Ag '64. (MIRA 17:11)

1. Chernovitskiy gosudarstvennyy universitet.

L 17083-63

ACCESSION NR: AP3004594

as the initial material for the growing of large CdSb monocrystals by the method of zonal recrystallization. Orig. art. has: 2 tables and 5 figures.

ASSOCIATION: Chernovitskiy gosudarstvenny*y universitet (Chernovtsy State University)

SUBMITTED: 15Oct62 DATE ACQ: 27Aug63 ENCL: 00

SUB CODE: ML NO REF SOV: 007 OTHER: 000

Card 2/2

L 17083-63 EWP(q)/EWT(m)/BDS AFFTC JD

ACCESSION NR: AP3004594 S/0126/63/016/001/0071/0079

55
54

AUTHORS: Kostur, N. L.; Psarev, V. I.

TITLE: A procedure for growing CdSb crystals from alloys of Cd-Sb system

27 — 27

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 1, 1963, 71-79

TOPIC TAGS: CdSb, crystal growing, Cd-Sb alloy

ABSTRACT: A new method for growing large CdSb monocrystals is offered. The procedure consisted of three steps. 1) Binary alloys Cd-Ag (Ag to 2%) and Cd-Hg (Hg to 20 by weight) were prepared. They had a uniphasal structure of solid solution on the Cd base. 2) Various amounts of antimony (from 10 to 40% weight) were added to these binary solutions. The solutions were melted and held at 620C for 5 hours while being stirred to insure a good distribution of the alloy components. After that, the melt was cooled to 500C, aged at that temperature for 20 hours, and cooled again in the oven. The resultant ternary alloys Cd-Ag-Sb and Cd-Hg-Sb had a two-phase structure consisting of the CdSb crystals and a cadmium eutectic. 3) The CdSb crystals were separated centrifugally from the melt. They contained from 20 to 40% weight of Sb. These crystals were used

Card 1/2

L 16320-65

ACCESSION NR: AP4044172

tion of holes which are the current carriers. Orig. art. has: 5 figures, 1 table

ASSOCIATION: Chernivets'ky*y derzhuniversey*tet(Chernovtsy State University)

SUBMITTED: 14Jun63 ENCL: 00

SUB CODE: MM, SS NO REF SOV: 003 OTHER: 003

Card 2/2

L 16370-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/ESD(t)/AFWL/ASD(a)-5 JD
ACCESSION NR: AP4044172 S/0185/64/009/008/0900/0907

AUTHOR: Kostur, M. L. (Kostur, N. L.); Psar'ov, V. I. (Psarev, V. I.)

TITLE: Solubility and effect on certain elements of the physical properties of InSb and CdSb

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 8, 1964, 900-907

TOPIC TAGS: elements solubility, InSb alloy, CdSb alloy, semiconductor, emf, lattice parameter

ABSTRACT: The solubilities of Ga, Hg, and Bi in InSb, and of Bi in CdSb have been investigated. The concentration of the admixture was determined by x-ray diffraction analysis from the changes of the lattice parameters. The solubilities of Ga up to 10.1 at. %, of Hg up to 6.2 at. %, and of Bi up to 0.26 at. % in the InSb crystals were found to depend on their dispersion. An expression was found for the change of the InSb lattice as a function of Ga content. Alloying of InSb with Ga and Hg produces a drop of thermal emf and an increase of the concentra-

Card 1/2

L 18257-63

ACCESSION NR: AP3002125

2

electrical conductivity and decrease in thermal electromotive force. The CdSb compound was also alloyed with mercury, with no appreciable effect on either electrical conductivity or thermal electromotive force. The results are shown on Figs. 1 and 2 in enclosures 01 and 02, respectively. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Chernivets'ky*y Derzhuniversy*tet. (Chernivets State University)

SUBMITTED: 24 Nov 62 DATE ACQ: 12 Jul 63 ENCL: 02

SUB CODE: PH NO REF SOV: 005 OTHER: 001

Card 2/2

L 18257-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AP3002125 S/0185/63/008/006/0694/0699

63
59

AUTHOR: Psar'ov V. I., Kostur M. L., Obstra A. V.

TITLE: On phase separation in alloys of Cd-Sb and In-Sb systems by centrifuging the melt.

SOURCE: Ukrains'kyy fizychnyy zhurnal, v. 8, no. 6, 1963, 694-699

TOPIC TAGS: phase separation, centrifuge separation, excess phase, liquid phase, alloy, melt, crystal growth, silver alloy, electrical conductivity, thermal electromotive force, thermal E.M.F., transport phenomena, mercury alloy, InSb, CdSb, centrifuge.

ABSTRACT: The authors suggested a method for separation of crystals of CdSb and InSb compounds from the liquid excess phase (Cd, In) by means of centrifuging the liquid melt. The composition of compounds and cooling conditions are given in a table. It was found that processes of crystal growth and separation of phases take place simultaneously as the melt is moving. The method was used for alloying CdSb crystals through alloys of Cd -- Sb and their subsequent separation from the excess component of the alloy, the alloyed Cd. The CdSb compound was alloyed with up to 1 to 1.5% of silver. This resulted in an increase in

Card 1/2

KOSTUR, K.N., podpolkovnik meditsinskoy sluzhby

UKT-2 apparatus for oxygen therapy. Vrach. delo no. 3:133-135 Mr '61. (MIRA 14:4)

(OXYGEN—THERAPEUTIC USE)

KO[illegible], Dusan, inz.

Some experiences obtained thus far from cooperation and merging in road transportation in Serbia. Tehnika Jug 18 no.11:Suppl: Saobracaj 10 no.11:2133-2136 N '63.

1. Upravnik Putnickog saobracaja "Lasta", Beograd.

POLAND

DONIGIEWICZ, Krzysztof, Dr. and KOSTUCH, Ryszard [Affiliation not given]

"Haematuria vesicalis bovis chronica and the Plants Growing in the Meadows and Pastures of the Powiat of Nowy Sacz."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 5, May 63, pp 237-241.

Abstract: [Authors' English summary] The authors studied the vegetation of pasture and meadow areas in five localities of the Nowy Sacz powiat, where chronic bovine haematuria vesicalis maintains at a constant level. In addition to Pteridium aquilinum, the authors believe that also Alectrolophus sp., Euphrasia stricta, Pedicularis palustris, P. silvatica, Euphorbia, Equisetum palustre, E. silvaticum, Rumex, Polygonum, Galeopsis tetrachit, and G. speciosa, which are common in the area may cause the disease and urge the pursuit of research and experiments on cattle to elucidate the situation. There are 13 references, of which seven (7) are in Polish, four (4) in German, and one each in Russian and French.

1/1

KOSTUCH, Ryszard

Plant vegetation on rains, conflagration remnants, and rubble in the city of Breslau. Rocz nauk roln rosl 83 no.2:403-442 '60.
(EEAI 10:9/10)

1. Instytut Melioracji i Uzytkow Zielonych, Krakow.

(Vegetation and climate) (Breslau)

KOSTUCH, Barbara; STOLTMAN, Czeslaw

Fluothane anesthesia according to our observations. Roczn. pom. akad. med. Szczecinski 9:187-197 '63.

1. Z I Kliniki Chirurgicznej Pomorskiej Akademii Medycznej Kierownik: doc. dr med. Jan Kortas.
(HALOTHANE) (ANESTHESIA, INHALATION)

KOST'YUKEVICH, N.I. [Kastsiukevich, N.I.], kand.sel'skokhozyaystvennykh nauk; BOYKO, A.V. [Boika, A.V.], kand.sel'skokhozyaystvennykh nauk

Effect of improvement cuttings on the gross productivity of pine plantations. Vestsi AN BSSR. Ser. biial. nav. no.4:37-44 '57. (MIRA 11:6)

(FOREST MANAGEMENT) (PINE)

Kostsova, Z. A.

SILANT'YEV, A.K; KHAYKINA, B.G; KOSTSOVA, Z.A; POLYAKOVA, L.A.

Application of tourniquet for obtaining penicillin concentration in the extremities. Vest. Khir. Grekova 70 no.4:6-9 1950. (CIML 20:1)

1. Of the Departments of Operative Surgery and Microbiology of Chkalov State Medical Institute (Director — I. I. Kositsyn).

KOSTSOVA, A.G.; KOZACHENKO, E.I.; OSINA, O.M.; VOLOKHOVA, V.P.; MAKSIMOVA, L.D.

Alkanesulfo acids. Part 32: Some alkanesulfomorpholides. Zhur. org. khim. 1 no.4:728-730 Ap '65. (MIRA 18:11)

1. Voronezhskiy gosudarstvennyy universitet.

KOSTSOVA, A.G.

Alkanesulfonic acids. Part 37: Halogenation of N-arylamides of propanesulfonic acid. Zhur. org. khim. 1 no.6:1022-1024 Je '65. (MIRA 18:7)

1. Voronezhskiy gosudarstvennyy universitet.

L 36711-65

ACCESSION NR: AP5003122

2

mixtures of mercaptans, predominantly dodecylmercaptan, were designated technical dodecylmercaptan. The narrow friction gave a better product. Preliminary tests with the technical dodecylmercaptan indicated it was a good polymerization regulator for synthetic rubber. Orig. art. has: 4 tables

ASSOCIATION: Voronezhskiy gosudarstvenny*y universitet (Voronezh State University)

SUBMITTED: 26Dec62 ENCL: 00 SUB CODE: GC, MT

NR REF SOV: 003 OTHER: 008

Card 2/2

L 36711-65 EPF(c)/EWP(j)/EWT(m) Pc-4/Pr-4 RM

ACCESSION NR: AP5003122 S/0080/65/038/001/0170/0173

AUTHOR: Kostsova, A. G.; Smol'yaninova, Yu. L.; Shatalov, V. P.; Kovrizhko, L. F.

TITLE: Synthesis of technical dodecylmercaptan

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 1, 1965, 170-173

TOPIC TAGS: technical dodecylmercaptan, synthesis, synthetic rubber, polymerization regulator

ABSTRACT: Technical dodecylmercaptan was synthesized from higher alcohols obtained by oxidation of paraffins at the Shebekinsk Chemical Co. of Synthetic Fatty Acids. (Shebekinskom khimicheskom kobinate sinteticheskikh zherny*kh kislot). A wide fraction of alcohols (C_9-C_{10}-C_{12}-C_{13}-C_{14}) and a narrow fraction (C_{10}-C_{12}-C_{13}), obtained by vacuum distillation of the former, was used. The alcohols were brominated or chlorinated (HBr, or gaseous HCl) to the halcalkyls which were then reacted with H_2S in an alcoholic solution of KOH. The resultant

Card 1/2

KOSTSOVA, A.G.; KOZACHENKO, E.I.

Alkanesulfonic acids. Part 30: Synthesis and properties of some esters of ethane- and α-chloroethanesulfonic acids. Zhur. ob. khim. 34 no.10:3185-3187 O '64. (MIRA 17:11)

1. Voronezhskiy gosudarstvennyy universitet.

KOSTSOVA, A.G.

Alkanesulfonic acids. Part 28: Halogenation of alkanesulfo-α-aminopyrididdes. Zhur.ob.khim. 33 no.2:595-596 F '63. (MIRA 16:2)

1. Voronezhskiy gosudarstvennyy universitet.
(Sulfohic acids) (Halogenation)

KOSTSOVA, A. G.; VELICHKO, I. M.; YEREMINA, T. V.

Alkanesulfonic acids. Part 27: Synthesis and properties of β-chloroethylalkane sulfonates. Zhur. ob. khim. 33 no.1: 35-38 '63. (MIRA 16:1)

1. Voronezhskiy gosudarstvennyy universitet.

(Sulfonic acids)

KOSTSOVA, A.G.; KOSHELEVA, E.P.

Properties of α-aminopyridides of alkanesulfonic acids.
Zhur.ob.khim. 32 no.3:1009-1010 Mr '62. (MIRA 15:3)

1. Voronezhskiy gosudarstvennyy universitet.
(Pyridine) (Sulfonic acids)

KOSTSOVA, A.G.; SURNINA, L.A.

Alkanesulfonic acids. Part 26. Chlorization of ethanesulfoanilide and its N-methyl- and N-acetyl derivatives. Zhur.ob.khim. 32 no.7:2287-2289 Jl '62. (MIRA 15:7)

1. Voronezhskiy gosudarstvennyy universitet.
(Ethanesulfonic acid) (Chlorination)

KOSTSOVA, A.G.

Alkanesulfonic acids. Part 25. Halogenation of alkanesulfonic p-phenitidides. Zhur. ob. khim. 31 no. 11:3671-3675 N '61. (MIRA 14:11)

1. Voronezhskiy gosudarstvennyy universitet.
(Sulfonic acid) (Halogenation)

KOSTSOVA, A.G.; TKACHENKO, N.N.; YEVSEYEVA, I.I.

Alkanesulfonic acids. Part 24: Acetylation of some N-aryl amides of alkanesulfonic acids in the presence of aluminum chloride. Zhur.ob.khim. 31 no.7:2241-2246 Jl '61. (MIRA 14:7)

1. Voronezhskiy gosudarstvennyy universitet.
(Sulfonic acid) (Amides)

Investigation of Alkane Sulfonic Acids. XXIII. Synthesis and Properties of Some Esters of Methane Sulfonic Acid

S/079/60/030/011/002/026
B001/B066

poor yield. There are 1 table and 4 references: 3 Soviet, 1 Belgian, 1 German, 1 British, and 1 Canadian.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: July 3, 1959

Card 2/2

S/079/60/030/011/002/026
B001/B066

AUTHORS: Kostsova, A. G. and Leont'yeva, L. B.

TITLE: Investigation of Alkane Sulfonic Acids. XXIII. Synthesis and Properties of Some Esters of Methane Sulfonic Acid

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 11, pp. 3541-3542

TEXT: The purpose of the present paper was the synthesis of some methane sulfonic acid esters which are described, but not sufficiently characterized, in publications, as well as some new esters of this acid. The authors obtained: bis (methane sulfonate) of ethylene glycol (I), bis (methane sulfonate) of α,γ-butylene glycol (II), tri-(methane sulfonate) of glycerol (III), methane sulfonate of ethylene chlorohydrin (IV), bis (methane sulfonate) of α-chlorohydrin of glycerol (V), of which (II) and (V) have so far not been described. The reaction took place by mixing methane sulfochloride with the corresponding alcohol in pyridine medium under cooling with subsequent precipitation of the ester by means of acid. The esters (II) - (V) resulted in good yields, (I), however, in

KOSTSOVA, A.G.

Synthesis and properties of salts and acyl derivatives of certain alkanesulfon-N-arylamides. Trudy VGU 57:141-143 '59. (MIRA 13:5)

(Sulfonamides)

Investigation in the Field of the Alkane Sulphonic Acids. XX. Benzoylation of the N-Arylamides of the Alkane Sulphonic Acids

SOV/79-29-8-65/81

The N-benzoyl-N-arylamides of the alkane sulphonic acids are of a crystalline nature, insoluble in water, and soluble in organic solvents (details are given in the table). There are 1 table and 3 Soviet references.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet
(Voronezh State University)

SUBMITTED: June 27, 1958

Card 3/3

in the case of the n-anisidides of the ethane and butane sulphonic acids only. Here a re-acylation took place during which the anisidide of benzoic acid and traces of the N-benzoylanisididdes of the corresponding ethane and butane sulphonic acids were formed. By this way (i.e. at 200-220°) the N-arylamides of the alkane sulphonic acids change into those of benzoic acid since the former become unstable at this temperature so that they decompose and form the more stable N-arylanisidides of benzoic acid. Since the benzoylation takes place at 140-150° while the re-acylation occurs at 200-220°, the author assumes that the re-acylation takes place in two stages (Scheme 3): initially a normal benzoylation of the N-arylamide proceeds, then a decomposition of the product according to the above scheme occurs under the influence of high temperature and hydrogen chloride. This is also indicated by the normal benzoylation reaction taking place in the pyridine medium, where the hydrogen chloride is bound by pyridine.

5(3)

AUTHOR: Kostsova, A. G.

SOV/79-29-8-65/81

TITLE: Investigation in the Field of the Alkane Sulphonic Acids. XX. Benzoylation of the N-Arylamides of the Alkane Sulphonic Acids

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2739-2742 (USSR)

ABSTRACT: Kostsova (Ref 1) recently showed that the arylamides of the alkane sulphonic acids have a tendency toward reactions in which substitutions on the nitrogen occur. It was observed that in this case both reaction conditions and the medium play a role. E.g., ethanesulphoanilide reacts with benzoyl chloride at 160° or in a pyridine medium according to scheme 1, whereas a re-acylation takes place at 200-220° and the anilide of benzoic acid forms: $RSO_2NHC_6H_5+C_6H_5COCl \rightarrow C_6H_5CO \text{---} NHC_6H_5+RCl+SO_2$. In the present paper a series of N-arylamides was benzoylated, such as the anilide of methane sulphonic acid, the o- and n-toluidides, the o- and n-anisidides of the methane-, ethane-, and butane-sulphonic acids. The best results were achieved in a pyridine medium where the N-benzoyl derivatives are produced with higher and purer yields. The reaction at 200-220° was carried out

Card 1/3

Investigation in the Field of the Alkane Sulfonic Acids. XIX. Chlorination of the N-Aryl Amides of Methane Sulfonic Acid

SOV/79-29-6-52/72

There are 5 tables and 4 references, 3 of which are Soviet.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: March 28, 1958

Card 3/3

Investigation in the Field of the Alkane Sulfonic Acids. XIX. Chlorination of the N-Aryl Amides of Methane Sulfonic Acid

SOV/79-29-6-52/72

The chlorination of the o- and p-anisidides leads to the dichloro anisididesi in the case of the p-anisidide, the tetrachloro benzoquinone is formed as side-product, in the case of o-anisidide, tetrachloro-o-anisidide is formed. The chlorination was carried out by means of gaseous chlorine. If the chlorination takes place with chlorine dissolved in dichloro ethane, monochloro toluidides (optimum ratio 1:2) result as main products in the chlorination of the p- and o-toluidides (at ratios of the chlorine to the initial toluidide 1:1, 1:2, 1:3, 1:4). In this connection tetrachloro toluidides form as side products in very small amounts. The determination of the position of chlorine in the nucleus by means of hydrolysis into the corresponding amine is not quite reliable since the isomeric monochloro-o-toluidines and their N-acetyl derivatives have very close constants [(Formulas (1) and (2)]. Thus, the influence exercised by the structure of the N-arylamides and the influence exercised by the reaction conditions on the character of the forming compounds was shown.

Card 2/3

5 (3)

AUTHORS: Kostsova, A. G., Gershman, R. Kh., Akin'shina, V. T. SOV/79-29-6-52/72

TITLE: Investigation in the Field of the Alkane Sulfonic Acids (Issledovaniye v oblasti alkansul'fokislot). XIX. Chlorination of the N-Aryl Amides of Methane Sulfonic Acid (XIX. Khlorirovaniye N-arilamidov metansul'fokisloty)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 2012-2016 (USSR)

ABSTRACT: The object of the present paper is the chlorination of anilide, of the toluidides and anisidides of methane sulfonic acid. The anilide chlorinates with the formation of 2,4-dichloro anilide, as is the case also with the anilides of the ethane and butane sulfonic acids (Ref 1); in the presence of ZnO better yields were obtained; the p-toluidide is chlorinated to the tetrachloro-p-toluidide; in this case however, ZnO inhibits the reaction. In the chlorination of the o-toluidide a rapid formation and a separation of the crystalline monochloro-o-toluidide is observed during the first 5 minutes; in the case of a longer duration of the chlorination (up to 45 min) a mixture of mono- and tetrachloro-o-toluidides is formed.

Card 1/3

KOSTSOVA, A.G.

Reactions of chloromethanesulfonyl chloride with some aromatic amines. Trudy VGU 49:15-17 '58. (MIRA 13:5)
(Methanesulfonyl chloride)
(Amines)

KOSTSOVA, A.G.; BORISOVA, N.T.

Alkanesulfonic acids. Part 18: Chlorination of alkanesulfonotoluidides. Zhur.ob.khim. 28 no.9:2420-2423 S '58. (MIRA 11:11)

1. Voronezhskiy gosudarstvennyy universitet.
(Chlorination) (Toluenesulfonic acid)

Investigation in the Field of Alkanesulfo Acids XVI. Chlorination of the Anisidides of Alkanesulfo Acids SOV/79-28-6-31/63

SUBMITTED: March 14, 1957

1. Organic acids--Chlorination

Card 3/3

KOSTROVA, A. G.

"Investigation of alkanesulfonic acids. V. Reaction of [illegible] with α-aminopyridine and sulfanilamide." (p. 1430)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1952, Vol. 22, No. 8

[illegible] A. G.

Aniline

Investigation of alkanesulfonic acids. Part 6. Reactions of alkanesulfochlorides with aniline and p-ansidine. Zhur.ob.khim. 22 No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1953. Unclassified.

KOSTSOVA, A. G.

(2)

Alkanesulfonic acid series. VII. Reactions of alkanesulfonyl chlorides with *p*-aminophenol. A. G. Kostsova (Voronezh State Univ.). *Zhur. Obshchei Khim.* 23, 610–12 (1953); cf. *C.A.* 48, 2627*b*, 4429*g*.—Addn. of 2 g. $MeSO_2Cl$ to 3.82 g. *p*-$H_2NC_6H_4OH$ in 50 ml. hot Me_2CO over 1–1.5 hrs., filtration, and evapn. of the filtrate gave 50% *p*-$MeSO_2NHC_6H_4OH$, m. 156° (from H_2O); the use of 1:1 reagent ratio lowers the yield. Similarly were obtained: 48% *p*-$EtSO_2NHC_6H_4OH$, m. 113°; 16% *p*-$BuSO_2NHC_6H_4OH$, m. 84°; 25% *iso*-$PrCH_2CH_2SO_2NHC_6H_4OH$, m. 88° (30–3% yield in EtOH). Similar reaction of iso-$PrSO_2Cl$ gave only tar. The products were sol. in dil. alkali and pptd. on acidification, thus confirming their structure. Cf. Adams and Looker, *C.A.* 46, 9*b*. G. M. Kosolapoff

MF 11-10-54

Investigation in the Field of Alkanesulfo Acids SOV/79-28-6-31/63
XVI. Chlorination of the Anisidides of Alkanesulfo Acids

Their separation could take place because of their solution ratios. In the chlorination of p-anisidides it was shown that in the case of ethane sulfoanisidide the dichloro-p--anisidide is formed as main product in a smaller yield than in the case of dichloro-o-anisidide and with a small yield of tetrachlorobenzoquinone. The chlorination of o--and p-anisidides can take place according to the common scheme 1. The results of the chlorination were obtained with gaseous chlorine. The position of chlorine in the aromatic nucleus of dichloroanisidide was proved by hydrolysis (scheme 2). The position of chlorine in dichloro--o-anisidine is not quite clear. The synthesized compounds with their data are mentioned in table 1. In the hydrolysis of the dichloroanisidides the corresponding dichloro-anisidines are formed. There are 2 tables and 3 references, 2 of which are Soviet.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

Card 2/3

AUTHOR: Kostsova, A. G. SOV/79-28-6-51/63

TITLE: Investigation in the Field of Alkanesulfo Acids (Issledovaniye v oblasti alkansul'fokislot)
XVI. Chlorination of the Anisidides of Alkanesulfo Acids (XVI. Khlorirovaniye anisididov alkansul'fokislot)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 6, pp. 1573-1578 (USSR)

ABSTRACT: Based on the previous paper (Ref 1) the chlorination of o-and p-anisidides of the same sulfo acids, viz. ethane--and butanesulfo acids was carried out. It was found that the presence of the methoxy group as well as its position in the nucleus exerts a considerable influence on the character and on the yield of the formed products, besides the small effect exerted by ethyl- and butyl radicals in the sulfoacid. In the chlorination of ethane- and butane sulfoanisidides with zinc oxides smaller yields are obtained as compared to the yields of unsubstituted anilides. In the chlorination of the o-anisidides dichloroanisidides form as main product, besides a small amount of tetrachloro-anisidides - all of them being colorless crystalline compounds.

Card 1/3

KOSTSOVA, A.G.; YANOVA, N.M.; SUSHKO, Z.N.

Investigation of thicalkane acids. Part 15: Chlorination of anilids of thioalkane acids. Zhur. ob. khim. 26 no.10:2855-2859 O '56. (MIRA 11:3)

1. Voronezhskiy Gosudarstvennyy universitet.
(Anilids) (Chlorination) (Acids, Organic)

KOSTSOVA, A. G.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61464

Author: Kostsova, A. G.

Institution: None

Title: Investigations of Alkane Sulfonic Acids. XIV. Syntheses and Properties of Acetyl- and Benzoylamides of 2-methylpropane- and 2-methylbutane Sulfonic Acids

Original Periodical: Zh. obshch. khimii, 1955, 25, No 7, 1343-1345

Abstract: Described is the synthesis of acetyl- and benzoylamides of 2-methylpropane sulfonic acid (I-acid) and 2-methylbutane sulfonic acid (II-acid). The obtained acid amides of pH 3.3-3.9, on interaction with Na in ether form Na-salts with yields of 70-80%. Into a solution of 5.5 g 2-methylpropane sulfonic acid chloride in 35 ml absolute ether cooled to -5°-7° is passed gaseous NH_3 until no more NH_4Cl precipate separates. By distillation of the solution are isolated 3.25 g 2-methylpropane sulfamide (III) as a noncrystallizing

Card 1/2

KOSTSOVA, A. G.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61454

Author: Kostsova, A. G.

Institution: None

Title: Investigations of Alkane Sulfonic Acids. XIV. Syntheses and Properties of Acetyl- and Benzoylamides of 2-methylpropane- and 2-methylbutane Sulfonic Acids

Original Periodical: Zh. obshch. khimii, 1955, 25, No 7, 1343-1345

Abstract: Described is the synthesis of acetyl- and benzoylamides of 2-methylpropane sulfonic acid (I-acid) and 2-methylbutane sulfonic acid (II-acid). The obtained acid amides of pH 3.3-3.9, on interaction with Na in ether form Na-salts with yields of 70-80%. Into a solution of 5.5 g 2-methylpropane sulfonic acid chloride in 35 ml absolute ether cooled to -5°-7° is passed gaseous NH_3 until no more NH_4Cl precipate separates. By distillation of the solution are isolated 3.25 g 2-methylpropane sulfamide (III) as a noncrystallizing

Card 1/2

KOSTSOVA, A. G.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61509

Author: Kostsova, A. G., Pryakhina, E. A.

Institution: None

Title: Investigations of Alkane Sulfonic Acids. XIII. On Properties of N-arylamides of Alkane Sulfonic Acids

Original Periodical: Zh. obsh. khimii, 1955, 25, No 13, 2497-2503

Abstract: Study of salt-formation, alkylation of the salts, acylation and chlorination of $C_2H_5SO_2NHC_6H_5$ (I). On methylation of I as well as of its Na- and Ag-salts there is formed $C_2H_5SO_2N(CH_3)C_6H_5$ (II). $C_2H_5SO_2Cl$ (III) in contrast with CH_3COCl and C_6H_5COCl (IV) reacts with I only in alkaline medium. Reaction with IV at >200° leads to formation of $C_6H_5CONHC_6H_5$ and III. On chlorination of I in lieu of N-chloramide there is formed apparently ethyl dichlorobenzene (V). To solution of 2 g I in 10 ml ether are added 0.125 g Na, to form 1 g of Na-salt of I which reacts in aqueous solution with

Card 1/2

Card 2/2

USSR/ Chemistry Reaction processes

Card : 1/1 Pub. 151 - 20/33

Authors : Kostsova, A. G., Shvetsova, L. S., and Kalganova, I. I.

Title : Investigation of alkane-sulfo acids. Part 12.- Reaction of beta-chloroethanesulfo chloride with aromatic amines

Periodical : Zhur. ob. khim. 24/8, 1397 - 1402, August 1954

Abstract : The reaction between beta-chloroethanesulfo chloride and some aromatic amines (aniline,p-toluidine,p-anisidine, p-phenetidine,p-nitroaniline and alpha-aminopyridine), was investigated. A new method for the derivation of beta-chloroethanesulfo chloride from dichloroethane, is described. The reaction products obtained are listed. The effect of temperature on the yields of the reaction products, is explained. Nine references: 5 USA and 4 USSR (1845 - 1953). Table.

Institution : State University, Voronezh

Submitted : February 12, 1954

Alkanesulfonic acids. XI. Reaction of alkanesulfonyl chlorides with p-chloroaniline and p-nitroaniline. A. G. Kostsova (State Univ., Voronezh). *Zhur. Obshchei Khim.* [illegible] (1954); cf. *C.A.* 48, 9900i.—Refluxing 2 g. $MeSO_2Cl$ with 4.4 g. p-$ClC_6H_4NH_2$ in Et_2O 1.5–2 hrs. and letting the mixture stand overnight gave after filtration and evapn. a yellowish residue which was treated with 5% NaOH and the alkaline filtrate acidified with dil. H_2SO_4 and chilled gave 56.6% p-$ClC_6H_4NHSO_2Me$, m. 148°. Similarly were prepd.: 78% p-$ClC_6H_4NHSO_2Et$, m. 121°; 40.6% p-$ClC_6H_4NHSO_2CHMe_2$, m. 97°; 50.8% p-$ClC_6H_4NHSO_2Bu$ (I), m. 82°; 50.3% p-$ClC_6H_4NHSO_2CH_2CH_2CHMe_2$, m. 61°. I (0.2 g.) in a small vol. of 7% NaOH treated with 0.6 g. MeI and refluxed 45 min., allowed to stand overnight, and evapd. gave 90% p-$ClC_6H_4NMeSO_2Bu$, m. 50° (from dil. EtOH). Similarly was prepd. 81% iso-[illegible]$SO_2NMeC_6H_4Cl$-p, m. 64–5°. Heating 1.5 g. $MeSO_2Cl$ and 1.8 g. p-$O_2NC_6H_4NH_2$ in 10 ml. pyridine 1–1.5 hrs. at 60–70°, followed by standing overnight, gave after diln. with H_2O-HCl and extn. of the ppt. with NaOH, followed by acidification of the alkaline ext., 14.8% p-$O_2NC_6H_4NHSO_2Me$, m. 180°; similarly were prepd.: 11.1% p-$O_2NC_6H_4NHSO_2Et$, m. 102°; 0% p-$O_2NC_6H_4NHSO_2Bu$, m. 91°; [illegible]% p-$O_2NC_6H_4NHSO_2CH_2CH_2CHMe_2$, m. 111°; m-$O_2NC_6H_4NHSO_2Me$, 18%, m. 134°. No reaction took place under these conditions with iso-$PrSO_2Cl$, iso-$BuSO_2Cl$, and $PhCH_2SO_2Cl$ on one hand and p-$O_2NC_6H_4NH_2$ on the other hand.

G. M. Kosolapoff

KOSTSOVA, A. G.

(2) Chem

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Alkanesulfonic acids. IV. Reactions of alkanesulfonyl chlorides with benzidine. A. G. Kostsova (Voronezh State Univ.). *J. Gen. Chem. U.S.S.R.* 22, 1471–2(1952) (Engl. translation). V. Reaction of alkanesulfonyl chlorides with 2-aminopyridine and sulfanilamide. *Ibid.* 1473–5. VI. Reactions of alkanesulfonyl chlorides with aniline and *p*-anisidine. *Ibid.* 1477–80.—See *C.A.* 47, 4862g.

H. L. H.

USSR/Chemistry - Sulfoacids
Chemistry - Anilides

Feb 49

"Research in the Chemistry of Alkylsulfoacids: III, Obtaining Arylamides of Alkylsulfoacids," A. G. Kostnova, Voronezh State U, 4 pp

"Zhur Obshch Khim" Vol XIX, No 2

PA 46/49T13

Obtains and lists characteristics of anilides, o-,m-, and n-toluidides, m-phenetidides, and alpha- and beta-naphthylides of chloromethane and alpha-chloroethanesulfo acids. Compounds obtained, particularly n-toluidides and phenetidides, are of pharmacological interest since similar

46/49T13

USSR/Chemistry - Sulfoacids (Contd) Feb 49

compounds (without chlorine in the radical) have exhibited antineurological properties. Submitted 23 Dec 46.

46/49T13

KOSTSOVA, A. G.

CA

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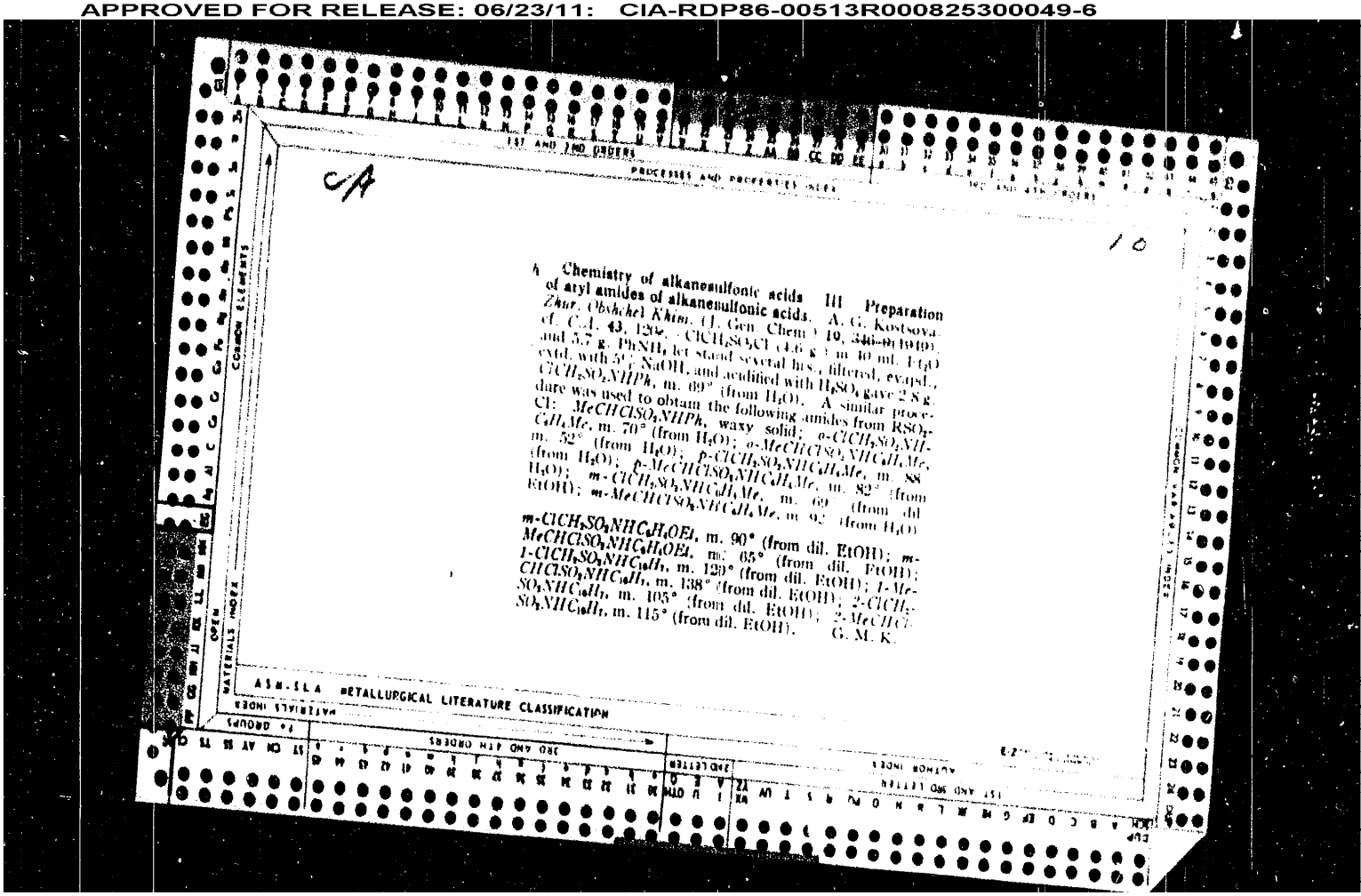
Chemistry of alkanesulfonic acids. III. Preparation of aryl amides of alkanesulfonic acids. A. G. Kostsova (Univ. Voronezh). *J. Gen. Chem. U.S.S.R.* **10**, 307-10 (1940)(Engl. translation). See *C.A.* **43**, 6568*h*.
F. L. C.



CA

10

Chemistry of alkanesulfonic acids. III. Preparation of aryl amides of alkanesulfonic acids. A. G. Kostsova. *Zhur. Obshchei Khim.* (J. Gen. Chem.) **10**, 346–9 (1940). cf. *C.A.* **43**, 1265. $ClCH_2SO_2Cl$ (4.6 g.) in 40 ml. Et_2O and 5.7 g. $PhNH_2$ let stand several hrs., filtered, evapd., extd. with 5% NaOH, and acidified with H_2SO_4 gave 2.8 g. $ClCH_2SO_2NHPh$, m. 89° (from H_2O). A similar procedure was used to obtain the following amides from RSO_2Cl: $MeCHClSO_2NHPh$, waxy solid; *o*-$ClCH_2SO_2NHC_6H_4Me$, m. 70° (from H_2O); *o*-$MeCHClSO_2NHC_6H_4Me$, m. 52° (from H_2O); *p*-$ClCH_2SO_2NHC_6H_4Me$, m. 88° (from H_2O); *p*-$MeCHClSO_2NHC_6H_4Me$, m. 82° (from H_2O); *m*-$ClCH_2SO_2NHC_6H_4Me$, m. 69° (from dil. EtOH); *m*-$MeCHClSO_2NHC_6H_4Me$, m. 92° (from H_2O).

m-$ClCH_2SO_2NHC_6H_4OEt$, m. 90° (from dil. EtOH); *m*-$MeCHClSO_2NHC_6H_4OEt$, m. 65° (from dil. EtOH); 1-$ClCH_2SO_2NHC_{10}H_7$, m. 129° (from dil. EtOH); 1-$MeCHClSO_2NHC_{10}H_7$, m. 138° (from dil. EtOH); 1-$MeSO_2NHC_{10}H_7$, m. 105° (from dil. EtOH); 2-$ClCH_2SO_2NHC_{10}H_7$, m. 115° (from dil. EtOH). G. M. K.

KOSTSOVA, A. G.

PA 8/49T47

USSR/Chemistry - Acids, Sulfo, Preparation
Chemistry - Acids, Sulfo, Properties

Apr 48

"Studies in the Field of Fatty Sulfo Acids," A. G. Kostsova, Lab Org Chem, Voronezh State U, 3½ pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

Describes preparation and properties of the benzoyl-, acetyl- and propionylamines of methane- and ethanesulfoacids, and also the propionylamides of chlormethane- and α-chlorethane sulfoacids. Submitted 23 Dec 1946.

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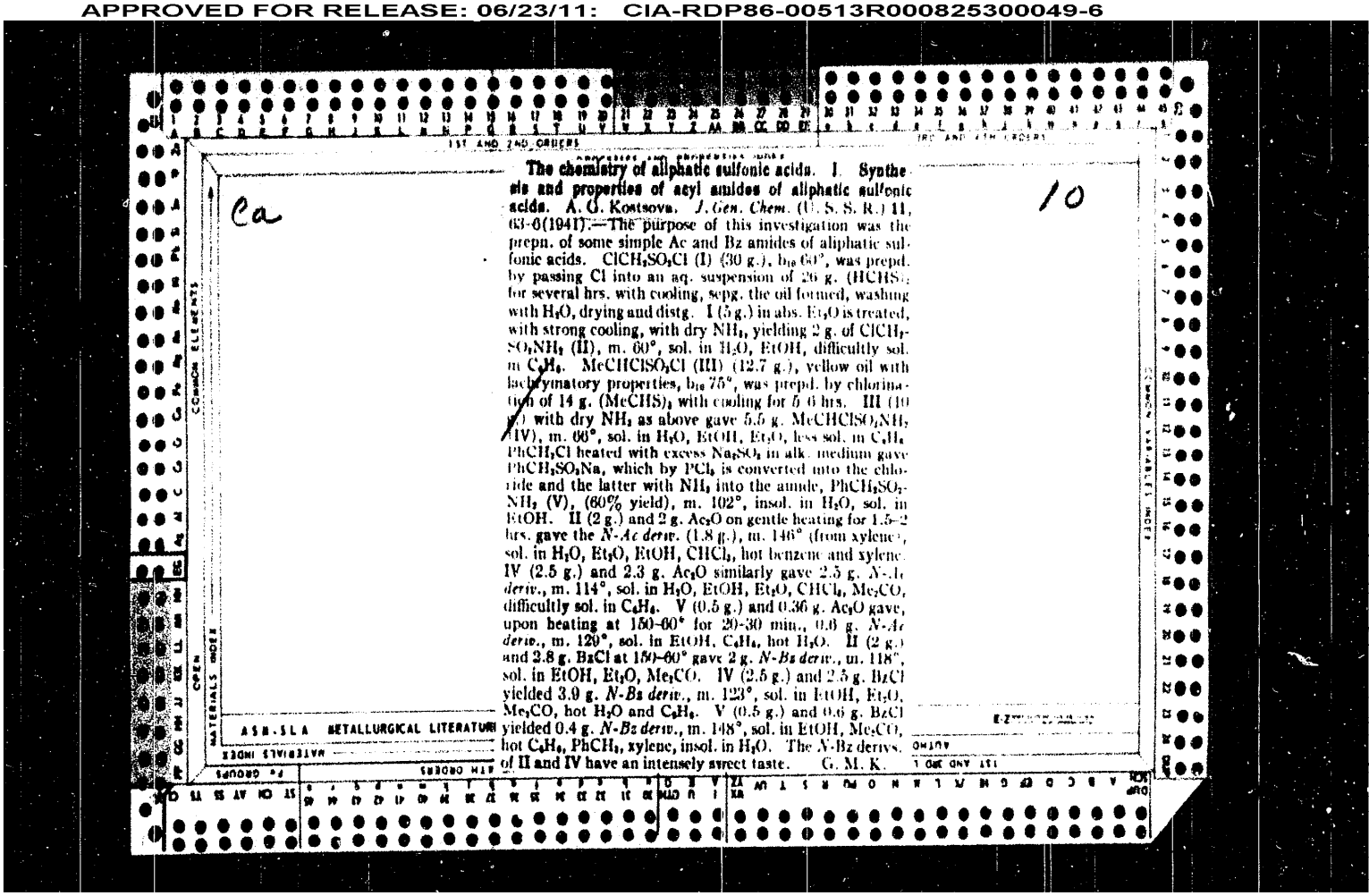
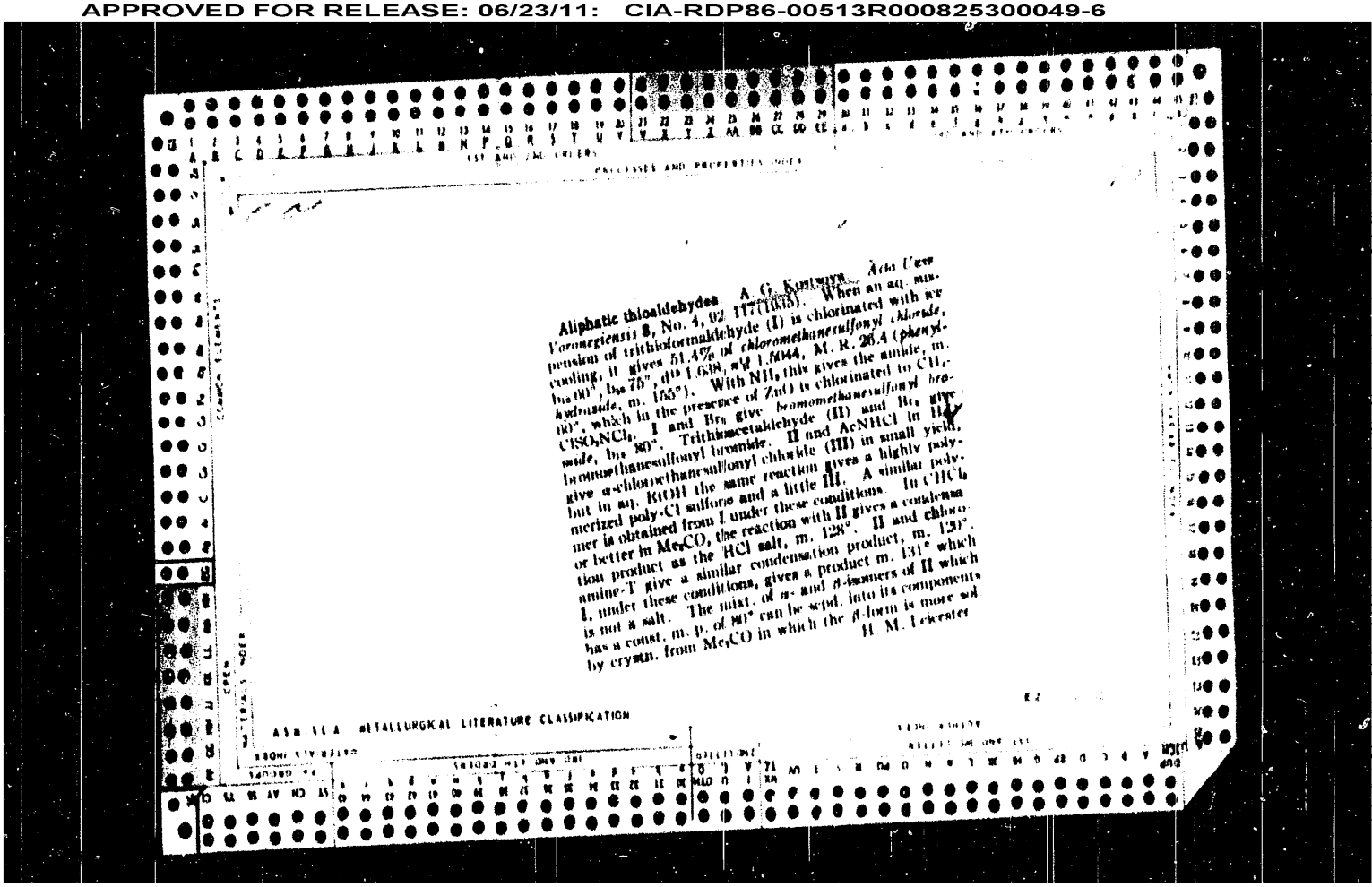


The chemistry of aliphatic sulfonic acids. I. Synthesis and properties of acyl amides of aliphatic sulfonic acids. A. G. Kostsova. *J. Gen. Chem.* (U. S. S. R.) 11, 63-6(1941).—The purpose of this investigation was the prepn. of some simple Ac and Bz amides of aliphatic sulfonic acids. $ClCH_2SO_2Cl$ (I) (30 g.), b_{16} 60°, was prepd. by passing Cl into an aq. suspension of 26 g. $(HCHS)_3$ for several hrs. with cooling, sepg. the oil formed, washing with H_2O, drying and distg. I (5 g.) in abs. Et_2O is treated, with strong cooling, with dry NH_3, yielding 2 g. of $ClCH_2SO_2NH_2$ (II), m. 60°, sol. in H_2O, EtOH, difficultly sol. in C_6H_6. $MeCHClSO_2Cl$ (III) (12.7 g.), yellow oil with lachrymatory properties, b_{16} 75°, was prepd. by chlorination of 14 g. $(MeCHS)_3$ with cooling for 5–6 hrs. III (10 g.) with dry NH_3 as above gave 5.5 g. $MeCHClSO_2NH_2$ (IV), m. 60°, sol. in H_2O, EtOH, Et_2O, less sol. in C_6H_6. $PhCH_2Cl$ heated with excess Na_2SO_3 in alk. medium gave $PhCH_2SO_3Na$, which by PCl_5 is converted into the chloride and the latter with NH_3 into the amide, $PhCH_2SO_2NH_2$ (V), (60% yield), m. 102°, insol. in H_2O, sol. in EtOH. II (2 g.) and 2 g. Ac_2O on gentle heating for 1.5–2 hrs. gave the *N-Ac deriv.* (1.8 g.), m. 146° (from xylene), sol. in H_2O, Et_2O, EtOH, $CHCl_3$, hot benzene and xylene. IV (2.5 g.) and 2.3 g. Ac_2O similarly gave 2.5 g. *N-Ac deriv.*, m. 114°, sol. in H_2O, EtOH, Et_2O, $CHCl_3$, Me_2CO, difficultly sol. in C_6H_6. V (0.5 g.) and 0.36 g. Ac_2O gave, upon heating at 150–60° for 20–30 min., 0.6 g. *N-Ac deriv.*, m. 120°, sol. in EtOH, C_6H_6, hot H_2O. II (2 g.) and 2.8 g. BzCl at 150–60° gave 2 g. *N-Bz deriv.*, m. 118°, sol. in EtOH, Et_2O, Me_2CO. IV (2.5 g.) and 2.5 g. BzCl yielded 3.9 g. *N-Bz deriv.*, m. 123°, sol. in EtOH, Et_2O, Me_2CO, hot H_2O and C_6H_6. V (0.5 g.) and 0.6 g. BzCl yielded 0.4 g. *N-Bz deriv.*, m. 148°, sol. in EtOH, Me_2CO, hot C_6H_6, $PhCH_3$, xylene, insol. in H_2O. The *N*-Bz derivs. of II and IV have an intensely sweet taste. G. M. K.

The polymerization of pseudobutylene. A. G. Kos-
sova. *Acta Univ. Voronegiensis* 9, No. 3, 125-31(in
German 130)(1937).—When pseudobutylene is passed
into H_2SO_4, d. 1.82, it polymerizes to a clear mixt. which
consists mostly of higher polymers. The mono-, di-
and trimers can be isolated, which shows that polymeriza-
tion proceeds through them. Only olefins are found in
the product. Dil. H_2SO_4 does not cause polymerization
unless the olefin is heated with it in a sealed tube at 150-
50°. The reaction is more complete, the stronger the

acid used. In a sealed tube $ZnCl_2$ causes no polymeriza-
tion, and H_3PO_4 very little, but if 30% of the wt. of
olefin of $PhSO_3H$ is used, good yields of polymer, b. up to
160°, are obtained. H. M. Leicester



Aliphatic thioaldehydes A. G. Kuntsyn. *Acta Univ. Voronegiensis* **8**, No. 4, 92 117(1938). When an aq. suspension of trithioformaldehyde (I) is chlorinated with ice cooling, it gives 51.4% of *chloromethanesulfonyl chloride*, $ClCH_2SO_2Cl$, b$_{10}$ 75°, d_4^{20} 1.638, n_D^{20} 1.4944, M. R. 26.4 (*phenylhydrazide*, m. 155°). With NH_3 this gives the amide, m. 60°, which in the presence of ZnO is chlorinated to $ClCH_2SO_2NCl_2$. I and Br_2 give *bromomethanesulfonyl bromide*, b$_{10}$ 80°. Trithioacetaldehyde (II) and AcNHCl in H$_2$O give *α-chloroethanesulfonyl chloride* (III) in small yield, but in aq. KOH the same reaction gives a highly polymerized poly-Cl sulfone and a little III. A similar polymer is obtained from I under these conditions. In $CHCl_3$ or better in Me_2CO, the reaction with II gives a condensation product as the HCl salt, m. 128°. II and chloramine-T give a similar condensation product, m. 129°. I, under these conditions, gives a product m. 131° which is not a salt. The mixt. of α- and β-isomers of II which has a const. m. p. of 80° can be sepd. into its components by crystn. from Me_2CO in which the β-form is more sol.

H. M. Leicester

MANDRYKA, Aleksey Petrovich; OKUNEV, B.N., otv. red.[deceased];
KOSTSOV, R.I., otv. red.; SUSHKOVA, T.I., red.izd-va;
BOCHEVER, V.T., tekhn. red.

[History of ballistics; to the middle of the 19th century]
Istoriia ballistiki; do serediny XIX v. Moskva, Izd-vo
"Nauka." 1964. 374 p. (MIRA 17:2)